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ON THE REPORTED OCCURRENCE OF THE GOLD-VENTED THRUSH AND SPOTTED EAGLE OWL IN IRELAND.

By RICHARD J. USSHER.

In his "Handbook of the Birds of Great Britain," published in Allen's 'Naturalists' Library,' Mr. Sharpe writes (vol. i. p. 318):- "A specimen of a Pycnonotus is said to have been shot near Waterford in January, 1838, by Dr. R. Burkitt, and skinned by him. It turns out to be the Bulbul of South Africa, P. capensis. . . . There is not the slightest probability of the bird having migrated from the Cape to Ireland, and the supposition that it might have been an escaped specimen might have been entertained but for the fact that an Eagle Owl, shot in Ireland by the same gentleman, turned out to be another South African species, viz. Bubo maculosus. There seems, therefore, to be some mistake connected with the occurrence of these African species in Ireland, and the birds had better be dropped out of the British list altogether." I can well understand the propriety of excluding from our avifauna a species that may have escaped from confinement, and has only occurred once; but as to the facts of both these birds having been shot near Waterford I wish to remove all misconception.

My valued friend Dr. Burkitt died on July 3rd, 1893, at the age of eighty-six. Previously to 1830 he began to collect and preserve native birds, and continued to do so for more than fifty years in Waterford, and subsequently at Belmullet. Little or no interest was taken in his pursuits by his fellow-townsmen. He

never saw a museum in his life, nor possessed a modern handbook of British birds until 1890. Yet he pursued Ornithology devotedly and untiringly, and was one of the local authorities so often quoted by William Thompson. No one could know him without recognizing the simplicity of his character, his keen sensitiveness in matters of honour, and absence of mercenary motives. I have before me his ornithological papers and his MS. collecting-book, with data of birds preserved by him from 1830 to 1891, from the Robin and Blackbird to the Great Auk! In this book he entered many particulars, even the preservative and stuffing material used. He would let no one examine this book in his lifetime, keeping it merely as a private record. I find in it this entry:—"10th Jan. 1838, I obtained a specimen of the Gold-vented Thrush, Pycnonotus chrysorhœus, shot at Mount Beresford within 4 miles of Waterford."

Dr. Burkitt described to me how he had found this bird amongst a lot of Blackbirds in possession of a lad who had shot them, as recorded by Thompson. Among his letters is a copy he made of the following, written to Mr. Yarrell:—

"Waterford, April 22, 1843.

"Dear Sir,-I trust you will not deem a perfect stranger in addressing you on this subject presumptuous, especially as I sent a notice of the enclosed, with a sketch, to Mr. Ball, of Dublin, to forward to Mr. Thompson for his opinion, some months ago, and have been advised, as Mr. Thompson was in London, to forward the specimen to your care, in order that you might both inspect It has puzzled my friends here not a little, being totally unknown to us all. Should Mr. Thompson not be in London, perhaps you would have the kindness to open the packet, as the bird may be worthy of inspection, though much mutilated. The history I gave Mr. Thompson several months ago, and regret to say that I neglected at the time I obtained it (Jan. 1838) to ascertain its sex, deeming it a variety of the immature or female Waxwing (a bird I have never seen), and, being much hurried at the time, merely skinned it, and, some months after, foolishly stuffed it, instead of leaving it as it was, never dreaming it would require as now to go on its travels.

"I am, &c.,

R. BURKITT, M.B.

"William Yarrell, Esq.,

Secretary to the Zoological Society, London."

Dr. Burkitt generously gave this bird (as well as his specimens of the Hawk Owl and the Great Auk) to Trinity College Museum. In a note in which he vehemently deplores the subsequent disappearance of the *Pycnonotus* from that Museum, he states, "it was poisoned with arsenical soap, so was safe from insects." The coloured sketch mentioned above was inspected by Prof. Newton in 1871, and is now in the Science and Art Museum, Dublin.

Dr. Burkitt's collecting-book contains an entry of the Spotted Eagle Owl as "Hawk Owl? Preservative, arsenic. Tow. Jan. 27, 1851. John Dobbyn, Esq., Woodlds. Shot near Belle Lake. This is not at all like Short-eared Owl, being twice size and much darker." The label on the specimen runs thus:—"Strix bubo? Linn., nondescript, or is it Eagle Owl? Shot near Belle Lake, Co. Waterford, Jan. 1851. Presented by John Dobbyn, Esq., of Woodlands. Marked this Owl formerly as Strix ulula, or Hawk Owl. R. B. 1862." The words "nondescript, or is it" having been written in different ink, apparently at a different time.

In his copy of Thompson's work, Dr. Burkitt interleaved this notice regarding it:-" The Spotted Owl, Bubo maculosus, Vieillot. A specimen of this bird was presented to me by the late John Dobbyn, Esq., and skinned, stuffed, and mounted by me Jan. 27th, 1851. It was placed among my native birds, where it lay upwards of thirty years unnoticed, till Mr. Richard Ussher, of Cappagh, discovered it there, and first brought it into notice, having been marked by me when mounted as a 'Hawk Owl' or Eagle Owl? (doubtfully), shot near Belle Lake, Co. Waterford, Jan. 1851. Not being able to find any description of this bird in any of my books of native birds, it was then forgotten, and neglected, till Mr. Ussher on inspecting my collection of native birds called my attention particularly to it in 1881, and requested me to send it, with some two other birds, to Mr. A. G. More, of the Natural History Department of the Science and Art Museum, Dublin, for inspection and decision as to its species, in 1882. Mr. More, understanding that it was my intention to leave Waterford for a distant part of Ireland, and that I was willing therefore to part with my collection of Irish birds, appeared anxious to purchase this and the other birds which I had sent him for the Dublin collection. This, of course, I would not listen to, being anxious to dispose of all together did I find a purchaser. However, a short time afterwards, some doubts having apparently arisen

amongst the London ornithologists as to the fact of this Owl being shot in Ireland, and as I wished to dispose of my native birds by sale, it struck me that Mr. Ussher, being practically the discoverer of this bird, was the person entitled to it," &c.

Accordingly Dr. Burkitt most kindly sent me the bird, and I presented it to the Science and Art Museum, Dublin.

When presenting this Owl to me in Sept. 1882, Dr. Burkitt wrote:—"Happening unfortunately at the time it came into my possession to be very fully occupied, I took but scant notice of this bird, merely inserting the locality of capture, the donor (now several years dead), skinning, preserving, mounting, and placing it amongst my Irish birds as you discovered it. This bird when presented to me, Jan. 27th, 1851, was apparently some days dead, and struck me at the time as having been a good deal handled (by its numerous examiners after Mr. Dobbyn had shot it), but was brought to me in the flesh. Mr. Dobbyn stated it had been shot in Belle Lake plantations. No doubt this bird may very possibly have been an escape from one of the numerous vessels passing up the Suir to Waterford."

On Dec. 8th, 1882, Dr. Burkitt, again writing to me about the Owl, in reply to my further enquiries, said:—"I am positive poor Mr. Dobbyn never intended to play me any practical joke or trick of any kind, and firmly believe that he shot the bird himself. The idea or suggestion that the bird was 'obtained through a dealer'! is, to say the least of it, to my mind perfectly ridiculous and far-fetched, when it came to me in the flesh! and requires no further comment. . . . I still adhere to the idea that it may have been an escaped bird. . . . I can not imagine the bird died in confinement, for its claws, legs and whole plumage, though much tossed, had not any appearance of a caged bird."

Dr. Burkitt failed to sell his collection in its entirety, and afterwards presented to the Science and Art Museum, Dublin, his Baillon's Crake, and on my visiting him at Belmullet he gave me an undetermined Warbler taken there marked "Whitethroat?" which proved to be the Barred Warbler, and is now in the same museum; and he gave the bulk of his collection in Waterford to his brother Archdeacon Burkitt. Thus the history of his collecting during sixty years was marked by many acts of disinterested generosity. To my knowledge he never sold a single bird. Persons who approached him with offers to buy this and

that specimen excited his intense displeasure. It is not a matter of indifference to Ornithology to state these personal facts, for his collecting-book and specimens illustrate the avifauna of the South-east of Ireland, affected as it is by the Pembroke and Wexford migration route, and the leading estuaries of Waterford Harbour and Tramore Bay. For instances of Owls accompanying a vessel for four hundred miles and alighting on the rigging, see Thompson, 'Birds of Ireland,' vol. i. p. 104.

# THE EVOLUTION OF BIRD-SONG.

By W. WARDE FOWLER, M.A.

In the last number of 'The Zoologist' Mr. Witchell complains that I misrepresented him in my 'Summer Studies of Birds and Books,' published last year, while he was absent from England. I have now re-perused his original paper very carefully, and also the Supplement to it, of which he has been good enough to send me a separate copy, and I am glad to take this opportunity of freely acknowledging that he has good grounds for complaint in at least two particulars.

- (1). I find that, as Mr. Witchell states, the Thrush is not one of those birds whose song is attributed by him to a humble origin, e.g. (as I stated his view), the cracking of a snail-shell. He does not seem to explain the song of the bird otherwise than as a series of imitations of other birds: it is only the "occasional clicking sound" which he compares to the breaking of the shell, and he does not in this instance deduce the song from a habit of repetition of sounds of this kind, as he does in some other cases. I much regret this misapprehension, and will see that it is corrected in any future edition of my book. It arose, I imagine, from the general tendency of Mr. Witchell's argument, which is stated by him as applicable to song in general, without mention of exceptions, in his concluding paragraph (Zool. 1890, p. 246).
- (2). When I suggested that it would be interesting to study the songs of some group of birds, with a view to the discovery of an archetypal character common to all its members, I was not aware that Mr. Witchell had added a short supplement to his paper, in which he had written that "the similar cries of certain nearly-allied species seem generic," &c., and had illustrated this

point by several examples. By some accident I had missed this supplement; and some expressions of mine (pp. 156, 157), which seem to upbraid Mr. Witchell for not doing what he had actually done, are unfair to him, and shall certainly be expunged on the first opportunity. I need hardly say that it never occurred to me that I was making an original observation and claiming precedence for it; for the idea was one that must have occurred to many who are familiar with the songs of birds, though it has never, so far as I know, been worked out scientifically.

On the other points of which he complains I hardly think I have seriously misrepresented Mr. Witchell, unless to criticise be necessarily also to misrepresent. For example, when I wrote that in his view the Corncrake "took a fancy to imitate the noise made by a cow in browsing," I think I was justified; for the whole tendency of his remarks (Zool. 1890, p. 239) suggests not merely similarity but imitation, and they conclude with the words, "Many birds reproduce less persistent sounds, which will be subsequently mentioned." This certainly implies that the examples just given are examples of reproduction of such sounds by birds, and not merely casual resemblances which Mr. Witchell is noting down for what they may be worth. perhaps this is one of those "surmises of a more or less valueless character," to which Mr. Witchell alludes on p. 134 of the last number. If so, I think he will allow that it is a little difficult for a critic to separate these from others to which he attributes more weight.

But I am unwilling to enter into a controversy with Mr. Witchell on points like these at present, for I understand that he is about to publish a work in which the whole subject will be dealt with afresh; and I have also had a friendly correspondence with him, the pleasant impression of which might possibly be obliterated if we were to take up arms in public. My only object in this note is to do him all the justice in my power by stating how far, in my opinion, I misrepresented his statements, and to express my regret. In other particulars I am sure he will allow that he laid himself open to criticism; and except in the points to which I have alluded, I do not think he has any real cause to resent it.

# ON A NEW BRITISH PETREL.

By BOYD ALEXANDER.

An example of Oceanodroma cryptoleucura, which proved on dissection to be a female, was picked up on the beach close to Littlestone, a small village six miles north of Dungeness, on December 5th last, at a time when strong north-westerly gales were prevalent. It was taken the next day to Mr. Bristow, the taxidermist, at St. Leonards, and there I saw it in the flesh. It was in poor condition, and clearly in appearance a storm-beaten victim.

This specimen was subsequently exhibited by Mr. Howard Saunders at a meeting of the British Ornithologists' Club, on April 15th, and the fact that it was found on the English coast will be of interest to ornithologists, not only because it adds a fresh species to the British Procellariida, but also on account of the recent discovery by Mr. Ogilvie Grant of the breeding of this species in the Canary seas, where it had been previously confounded with Leach's Fork-tailed Petrel (see 'The Zoologist,' 1895, p. 413). It may be well to give here a resumé of the range of O. cryptoleucura: - It is found in the South Atlantic, and inhabits the Sandwich Islands and St. Helena, while the most northern breeding point at present known is the Salvage Group. In the above places, therefore, it appears to be the representative form of Leach's Petrel (O. leucorrhoa). Although the latter species has occurred as far south as the Canaries, it can only be regarded in the same light as when found off the English coasts and off some of those of Eastern Europe-a mere straggler, though not an uncommon one.

On the other hand, when the lately increased straggling distribution of O. leucorrhoa is considered, it seems not unlikely that O. cryptoleucura will before long be met with quite as often as its close relative; in fact, it is not out of the question to suppose that cases may have occurred prior to the one here mentioned, but where proper identification has not been exercised.

The knowledge of ornithology possessed by a local taxidermist does not, as a rule, extend much beyond the pale of those species which have passed at different times through his hands, while some which require a close examination to be identified (and often are not carefully examined) may be seen so seldom by him that the distinctive characters of each are not kept clear in his mind. Hence it is evident how a mistake may be made. No fault of his, since in a bird-productive district he is a busy man, and has little time to acquire more than a superficial knowledge of the subject.

O. cryptoleucura is slightly smaller in size than Leach's Petrel, and possesses three distinct characteristics. I cannot do better than quote the descriptions of these species as given by Mr. Ogilvie Grant in his interesting paper on the birds of the Salvage Islands:—"O. cryptoleucura has the tail nearly square, the outer feathers being only slightly longer than the middle pair, the basal part of the outer feathers is white, and the upper tail-coverts are white, tipped with black. O. leucorrhoa has the tail deeply forked, the outer feathers being longer than the middle pair and dark to the base, while the upper tail-coverts are uniform white, not tipped with black."

# ORNITHOLOGICAL NOTES FROM NORFOLK FOR 1895. By J. H. Gurney, F.Z.S.

My register of Norfolk birds for the year 1895 contains entries concerning three rarities—the Broad-billed Sandpipers, the Black-winged Stilt, and Sabine's Gull, but is chiefly remarkable by the extraordinary number noticed of castaway Little Auks, which were still more plentiful further north. In fact, we in Norfolk only saw the tail end of the invaders. It is singular that up to 1862 Mr. Stevenson had booked not a single occurrence of this erratic little sea-bird in January (the month of this great invasion), and in 1890 Mr. Southwell, to whom I am as usual indebted for much assistance, could only mention one. autumn of 1895 was certainly rather remarkable for the number of Skuas of different species which occurred from Salthouse westwards, and ten Fulmar Petrels is an unusual number to have been noted in twelve months. A corresponding abundance of Skuas was noted by Mr. Cordeaux in the Humber district.

# JANUARY, 1895.

Prevailing wind N., as registered by Mr. A. W. Preston.

1st. Snow and frost. Great Northern Diver on a stall at Yarmouth (A. Patterson), and two Little Auks, of which more hereafter.

5th. Glaucous Gull in Yarmouth market (A. Patterson), and about the same date two more taken on the beach there (W. Lowne).

7th. Four or five young Glaucous Gulls appeared at Blakeney, where they were immediately recognised, and in a few days three of them had found their way to Mr. Pashley's, with four Kittiwakes (rather uncommon in winter), and a male and female Goosander. At the same time hundreds of Golden Plover were seen between Salthouse and Wells, and were abundant enough to be bought of the gunners for fourpence apiece (E. Ramm). Green Plovers were also very numerous around Breydon Broad, and Mr. Patterson believes they were fattening on the dead worms which were lying in the marshes by myriads, having been killed by an extraordinary high tide. The marshes were black and white with Plovers, and the oldest inhabitant had never seen so many (A. Patterson).

13th. Thirty White-fronted Geese were seen on Holkam Marsh (A. Napier).

14th. A Corncrake, which had missed its migration, and a three-legged Snipe were taken to Mr. R. Clarke, of Snettisham, who noticed that the former had at some time had a damaged wing, which, however, had quite healed. The supplementary leg in the Snipe springs from the tarsal joint, I understand, as in the malformed Gull's leg figured in 'The Zoologist,' 1869, p. 1685; on this subject see article "Monstrosities" in 'The Dictionary of Birds,' p. 587. I have not seen the Snipe, which must be a singular deformity.

15th. Picked up two Fulmar Petrels on the shore, one of them fresh enough to skin, a Puffin, and some Razorbills. This Puffin, like two others in the flesh, had a highly-coloured beak, though small, having probably shed its sheath in August. A small flock of Tufted Ducks were on Salthouse Broad, long reclaimed, but again under water, and allowed us to get two of their number; and the same day, Mr. Ramm tells me, a Black

Guillemot was shot there, which we had not seen, but which some more fortunate gunner secured.

19th. Four Wood Larks, a bird generally driven by snow to the coast, were watched by Mr. Patterson on the same "denes" where six had been shot a month previously, possibly the remains of the same flock, and a few days afterwards I saw two more, which had been sent to Mr. J. Cole to be stuffed, from near Yarmouth; and Mr. E. Saunders also had a pair. Shore Larks were more numerous than usual this month, and throughout the winter in the two or three spots which they regularly frequent. The great abundance of Bramblings inland during the hard weather was remarked on by several correspondents. Eight dozen were caught by a bird-catcher on the Caistor Road (Patterson). In the Humber district of Lincolnshire a corresponding abundance of Bramblings, Shore Larks, Golden Plovers, and Glaucous Gulls was noted by Mr. Cordeaux about the same time,—a usual coincidence, but always interesting.

26th. Lesser Spotted Woodpecker at Colney (W. Andrew).

29th. A white Woodcock was shot at Fishley by Mr. Read. A feather forwarded shows faint markings, which extended all over the plumage.

30th. Two Waxwings near Lynn (F. Wilson). Another about the same time was sent to Norwich, indicating only a small migration this year.

The gales of January had an altogether unprecedented effect on one well-known Arctic species, the Little Auk, or Rotche, sprinkling these dapper little sea-birds broadcast over all that portion of the north of Norfolk which is nearest to the coast. So far as I can make out, the greatest number were picked up between the 10th and 27th of January. On the 21st, the poor half-starved little voyagers were to be seen in small flocks passing along the north coast of Norfolk, flying a few yards above the sea, near enough to the beach for Mr. E. Ramm, who was on the look-out, to estimate that one flock contained a hundred. greatest number of Little Auks were undoubtedly picked up, or otherwise obtained, between Kings Lynn and Cley, where Mr. Ramm was stationed, and especially was this the case in the vicinity of Snettisham, Wells, and Blakeney. Most of the castaways at Blakeney, Cley, and Salthouse were taken to Mr. Pashley, the local taxidermist, but being ill at the time he only

stuffed thirty; while Mr. Dack, of Holt, mounted thirty-five. Mr. Clarke, of Snettisham, set up forty-one; and the three Norwich bird-stuffers eighty-four, sent in from various parts of the county. Besides these, other naturalists and amateurs stuffed eighty-three; two were sent to the Zoological Gardens by Colonel Feilden and Mr. Lestrange; and some others, picked up at or near Holkam, were taken to the Earl of Leicester, and not preserved. I think I cannot be over the mark in estimating birds thrown away and skeletons found on the beach at twenty, which gives a total of 295. Very few of these Little Auks were in full winter plumage, and one from Cromer had the sides and lower part of the neck nearly black. From Yorkshire, Mr. W. J. Clarke, of Scarborough, wrote that he had conclusively proved a large preponderance of females by dissection; and all the earlier ones sent to Mr. Gunn, and dissected in his absence by his son, were females except one, and the later comers nearly all males. same separation of the sexes was noticed by Mr. Roberts and by Mr. Robert Clarke.

#### FEBRUARY.

Prevailing wind N.E.

2nd. Five or six Glaucous Gulls were seen at Cley by Mr. T. Gunn, two of which were shot, with a Fulmar. About this time, Mr. Patterson reported Cuttlefish bones washed up along the beach for miles, and that one or two enterprising men gathered these chalky interiors in sacks to sell to our Canary-breeders, who hereabouts are rather a numerous fraternity. (See Zool. 1889, p. 15.)

9th. A Shag, Phalacrocorax cristatus, was shot at Snettisham (R. Clarke).

11th. A Yarmouth bird-catcher named Cubitt, taking advantage of the protracted frost, caught fifty-three starving Gulls in a clap-net, and brought them all alive to Mr. Patterson, viz. forty-one Black-headed Gulls, eleven Common Gulls, and one Lesser Black-backed Gull.

16th. A cat or a Tawny Owl killed and partly eat one of my pinioned Garganeys, and frightened one of the above-mentioned Gulls into the water, where it froze to death, and was found in the morning a veritable feathered iceberg!

20th. Sclavonian Grebe and several Whooper Swans were seen or shot at Cley (H. N. Pashley).

22nd. Eared Grebe and Whooper at Cley (Pashley).

27th. Two Sclavonian Grebes, Cormorant, and Purple Sandpiper at Cley.

28th. Received from a gunner at Cley two of the darkest-bellied Brent Geese I have ever seen, but with the white neck-patches widely separated in front as well as behind, showing that they could not be *Bernicla nigricans*. It is a mistake to suppose that the dark- and light-bellied races—if they be races—do not sometimes associate.

#### MARCH.

Prevailing wind S.W.

March 11th was the first real spring day, succeeding a total eclipse the night before. The great lake at Fritton, which had been frozen for many weeks, thawed rapidly, and immediately the appearance of a number of Great Crested Grebes was reported.

Then came several days of beautiful spring weather, and Robins began to nest, which did not prepare us for what was to follow.

24th. A hurricane, the most destructive ever known to timber in Norfolk, though lasting only from 2.30 to 4 p.m.; but in that short time this county lost about a quarter of a million trees, mostly Coniferæ, the prostrate silver firs, their heads all pointing to the east, being counted by thousands on scores of estates. Many Pheasants were buried alive, and Rooks, already nesting, were whipped to the ground with a few Wood Pigeons, but I did not see them. A great many trees were upset at Scoulton, where the Gulls had already assembled, but fortunately none grow on the part of the "hearth" where they breed, now limited to about an acre. In 1871, Stevenson says, the Gulls' nests extended over nearly fifty acres, and that as many eggs were taken in a day as were gathered during the whole of the present season (about 2000); not that this diminution was due in any way to the hurricane, which will be long remembered as being the greatest we have had since 1860.

31st. A Grey-headed Wagtail was taken on a smack off Yarmouth (B. Dye).

#### APRIL.

Prevailing wind S.W.

1st. A Black Guillemot was killed near Cley (Pashley). 26th. Two Kentish Plovers were shot at Yarmouth (B. Dye).

#### MAY.

Prevailing wind E. and N.

5th. Twelve Spoonbills visited Breydon tidal Broad, where Chambers, the watcher employed by the Breydon Wild Birds' Protection Society, guarded them splendidly, and they all passed on unscathed. A single one was seen a few days later (Patterson). In the seventeenth century, Spoonbills nested a little higher up the river within only about three miles of Breydon, and it seems not too much to hope that with protection they might be induced to breed again.

8th. As further evidence of the good which has been done, Mr. Patterson saw and counted in one walk ninety-nine Bartailed Godwits, twenty-seven Wigeon, fourteen Turnstones, forty-two Black Terns, and eight Sandpipers. The Black Terns, which were resting all together on a mud-flat in company with Gulls, flew up in a very erratic manner, screaming noisily, and shortly afterwards mounted high in the air, flying N.N.E.: perhaps the Zuider Zee was their next halting-place, or Naarden Meer.

9th. Nine Black Terns were seen sitting on a rail overhanging a pond at Snettisham (R. Clarke).

15th. A Kestrel's nest was found in a wheat-stack at Horning-toft about a foot into the roof, underneath the eaves (Davey).

29th. Two Fulmar Petrels were picked up on the shore at Cley (Pashley), but they may have been dead some time, for I have known one to lie on the beach two months or more before the sea disintegrated its carcass; and the skeleton of one of the January Little Auks was reported as still sticking in a bush in August.

A Marsh Harrier and a Scaup Duck were noted this month at Swaffham (Gunn); and some Crossbills at Rollesby and Belton. Three of the last-named were caught in a Pheasant enclosure at Somerton (W. Lowne).

#### JUNE.

Prevailing wind N.E.

8th. Caught a Squirrel in the act of eating a young Starling, to the indignation of its parents and several other birds. Jays also kill a great many nestlings.

19th. A pair of Black Terns at Scoulton contemplating the

"hearth," or Gull-island, than which a more suitable nestingplace could not be found, entertained us greatly while we "punted" round it.

A pure white Cuckoo, with pink eyes, nearly full-grown, was sent from near Stratton to Mr. Roberts, of Norwich, at the end of the month,—a real albino, and a beautiful bird. Young Hawfinches were reported from Stoke, Swardeston, Thorpe, Feltwell, and Colney, where there was a nest of four, and two were brought up by hand.

## JULY.

Prevailing wind S.W.

5th. A Scoter was shot or picked up off Blakeney: I have seen a flock later than this.

17th. A pair of Sandwich Terns at Blakeney, one with a fish in its beak, flying as if it was going to feed a young one somewhere (Pinchin).

27th. Three Green Sandpipers appeared at Northrepps (R. H. G.), after heavy rain.

#### AUGUST.

Prevailing wind W.

1st. A Golden Oriole still in song was reported to be at Framingham Earl (S. Bligh).

2nd. Several Black Terns at Hickling (M. C. Bird).

3rd. Four Wood Sandpipers were brought into Yarmouth (W. Lowne), shot somewhere in the neighbourhood.

7th. A number of adult Arctic Terns and two flocks of Black Terns were seen at Cley (E. Ramm).

13th. Two Broad-billed Sandpipers on the Blakeney "beachway" were seen by three or four observers, and one was shot. This was taken to Mr. H. N. Pashley, who mounted the bird for the Caistor (private) Museum. This is the first time it has occurred at Cley, but four or five have been taken at Breydon, where this species was first recognised as British in 1836. It is as rare in Heligoland (Gatke) as it is in England.

14th. A Manx Shearwater, not quite adult, was killed at Cley (E. Connop), and another about the same time at Wells. A Temminek's Stint was shot by Pinchin; and three young Montagu's Harriers, in richest bay plumage, doubtless bred on Kelling Heath, were sent to Mr. Pashley, who found young

chickens about ten days old in all of them. A day or two afterwards Mr. Pashley and Mr. Dack each received another, which completed the slaughter of the family party! perhaps necessary, though it is impossible not to regret it from a naturalist's point of view.

16th. A Dotterel was shot at Yarmouth (E. C. Saunders).

20th. A young Buffon's Skua, with a dark breast and a very small beak, was shot in Blakeney Harbour by Mr. Robert Gurney.

23rd. A Shearwater, several Black Terns, five Richardson's Skuas, one Buffon's Skua, and three Sandwich Terns, were seen or shot at Cley (R. Gurney); and about this time some Green Sandpipers.

31st. Some Green Sandpipers at Fritton (N. Buxton).

#### SEPTEMBER.

Prevailing wind S.E.

4th. Counted sixteen Great Crested Grebes from Mr. Buxton's boat-staithe on Fritton Lake, but as we could not see half the lake, it is safe to estimate that there were at least thirty-five. On rowing to the end several more appeared, two-thirds of them young ones, and one or two being little more than half-grown were yet able to keep up with their parents. I did not see more than two young in general, which looks as if the marauding Pike had had his share, and in some cases there was only one; they are strictly protected from gunners.

6th. Two Buffon's and two Richardson's (Arctic) Skuas, all young birds, paid the usual penalty at Cley (Pashley); and the same day a very good immature Buffon's Skua, now in Mr. Robert Gurney's collection, was shot at Rockland.

7th. A Spoonbill at Burgh Castle (W. Sharman).

10th. Some Pied Flycatchers were seen on the coast by Mr. Gunn.

12th. Some Skuas were seen near Cley by Mr. Gunn. A Manx Shearwater was shot at Hunstanton (C. Whitty), and another off Cley.

13th. A flock of about sixteen Sandwich Terns was seen at Cley by Mr. T. E. Gunn; and a young Buffon's Skua killed.

15th. First Pink-footed Geese appeared at Holkam (Lord Leicester).

19th. Storm Petrel was seen at Blakeney Bar (F. D. Power).

21st. Three young Richardson's Skuas at Cley (Pashley).

22nd. A Rough-legged Buzzard at Castle Rising (R. Clarke).

24th. A Peregrine Falcon at Holkam (Lord Leicester).

25th. About four hundred Mallard, forty Teal, four Wigeon, forty Coots, and fifty Canada Geese, were counted on the lake at Holkam. A Solitary Snipe at Burgh (E. C. Saunders); and a number of Pied Flycatchers at Cley (F. D. Power). About this date seven hundred and seventy-four Partridges were killed at Feltwell by three guns, one of the biggest scores ever made in one day in this county, but it was a very good season. Tame Pheasants also did very well; but as an instance of the dangers run by such birds, I may relate that two stray dogs killed forty-two and twenty-two fowls in two nights, supposed at first to be the work of a fox, but the dogs came again, and paid the penalty of the law.

#### OCTOBER.

Prevailing wind W.

2nd. A Woodcock was shot at Threxton (J. Tingey).

4th. A Pomatorhine Skua was shot at Cley (A. Sapsworth).

5th and 6th. A Spoonbill was seen at Morston by Mr. Sapsworth; also a Pied Flycatcher, Buffon's Skua, Velvet Scoter, and a large number of Gannets in the same neighbourhood.

8th. Two Stilts were seen on Wolferton Marsh by Mr.

Charles Plowright and T. Petch.

12th. A Black-winged Stilt, a young female with some black feathers coming on the upper wing-coverts, the only indication of any change, was shot on Castleacre Common (T. M. Hudson, Zool. 1895, p. 434). This species has not turned up in Norfolk, except in one unconfirmed anonymous instance ('St. James' Gazette,' Jan., 1889), since 1875, when, as in the present case, a pair appeared. A young Norfolk Plover, about two-thirds grown, was shot on the east bank at Salthouse (Pashley).

16th. A Rough-legged Buzzard near Cley (Pashley).

17th. Buffon's Skua, an immature male, was shot at Yarmouth (E. C. Saunders); and a Guillemot was picked up at Dunton, inland (E. Dowell).

18th. Enormous migration of Corvidæ, Hooded Crows principally, and many Jackdaws at Cley (Dr. George Power).

19th. A Norfolk Plover near Cley (Pashley).

21st. Two Long-tailed Ducks at Cley; and a Peregrine.

22nd. A Fulmar, a Storm Petrel, and a Sabine's Gull at Wells (Colonel Feilden); the wind at the time was blowing strong from the north-east. This is the fifth Sabine's Gull recorded for Norfolk; all immature, and all taken in October. Although it came in with the gale, it was probably moving against the wind on the 21st, which was then variable in the morning, and light from the westward in the evening (Meteorological Office Returns). At the same time another Fulmar, two Grey Phalaropes, two Pomatorhine Skuas, and a Ringed Guillemot, were taken between Wells and Salthouse, and were received by Mr. Pashley for preservation; and Dr. Power shot a Glaucous Gull.

24th. A young Long-tailed Duck was picked up on the shore at Overstrand.

26th. A number of dead Corvidæ were noticed; and a Fulmar was washed up on the shore (Dr. George Power). About this time Mr. Ramm found some birds washed up, including a Shore Lark, two Chaffinches, and some Rooks.

#### NOVEMBER.

Prevailing wind S.W.

1st. A female Great Skua was shot on the beach at Snettisham (R. Clarke).

2nd. Two Fulmars were picked up on Holme beach by Mr. Plowright, making the unusual total of nine for twelve months. About this time several Wood Pigeons appeared which had shed their flight feathers and not replaced them, and in some cases to such an extent was the wing divested of its quills that the birds could not fly at all. The same inability of locomotion was noticed in several other parts of England ('Field,' pp. 833, 902, 946).

24th. Seven Swans flew over Norwich, very high, going south-east against the wind (Dr. Wheeler).

#### DECEMBER.

Prevailing wind W.

8th. A Black Redstart was seen at the foot of a mud-cliff at the mouth of the Ouse (C. Plowright).

13th. A young Long-tailed Duck was shot at Barton (Gunn).
14th. A yellow or dun-coloured Starling at Hingham (E. Roberts).

16th. A Long-tailed Duck was shot at Cley, and two Mergansers (Pashley); and a few days later three more Mergansers. A Pink-footed Goose with yellow legs was taken to Mr. Pashley while fresh. Mr. Saunders says the Bean and Pink-footed Geese have been known to hybridize in confinement, and doubtless they sometimes cross in a wild state. M. Suchetet mentions several hybrid Geese ('Oiseaux Hybrides,' p. 738).

23rd. A cinnamon-coloured Yellowhammer at Yarmouth (Patterson).

24th. A Little Gull was caught alive during a gale at Lowestoft (H. Bunn).

26th. A Black-throated Diver was shot at Cley (Pashley).

28th. A Waxwing at Filby (Lowne).

# ON WILD FORMS OR SUB-SPECIES OF MUS MUSCULUS. By G. E. H. Barrett-Hamilton.

I was much interested in reading the remarks of Mr. Oldfield Thomas (pp. 137-139), "On a Wild Living Mouse of the Mus musculus group in Portugal," as last spring, while in Morocco, I met with a white-bellied form of Mus musculus, which occurred both about Tangier and also at Scharff-el-Akab, three or four hours' journey southwards. I have four specimens of this mouse, all males, in my collection, and their dimensions are as follows:—

Length o	f head	and	body		83	80	81	80 mm.
,,	tail				57	59	53	56 ,,
,	hind	foot			17	17	16	16 ,,

After carefully reading M. Fernand Lataste's description of his  $Mus\ spretus$ ,\* I am of opinion that my mice belong to this species, although the line of demarcation between the colours of the upper and under sides is more distinct in mine than it was in his specimen, and although I cannot find that "sa première molaire supérieure présente un talon supplémentaire antérieur." Since, however, Lataste based his species on a single specimen (a female containing 4+5=9 young, and with the mammæ as in  $Mus\ musculus$ ), from "l'Oued Magra, entre M'sila et Barika, au nord du

<sup>\* &</sup>quot;Note sur les Souris d'Algérie et description d'une espèce nouvelle (Mus spretus)." Actes Soc. Linn. Bordeaux, tom. xxxvii. (1883).

chott du Hodna, Hauts-Plateaux Algériens," I think it very possible that these slight differences in colour are merely due to individual peculiarities, and that the extra "talon" of the first upper molar of M. Lataste's specimen will not be found in other examples. At all events I prefer to identify my specimens with his Mus spretus than to make a new species or subspecies of them, and I think my views gain support from an examination of a considerable number of specimens of Mus musculus-like animals from various localities now in the British Museum collection. These specimens are very puzzling, for the extreme forms, though at first sight very distinct, intergrade in a wonderful manner. They, however, seem to bear out Mr. Thomas's suggestion that we have in many parts of Europe, as well as in N. Africa, Arabia, and Asia, two forms of the Mus musculus group which differ from each other in coloration, one of which is to be found in houses, and the other in the fields and open country. Whether there exist more than one of these wild forms is as yet a doubtful question, but the following forms have received names, and perhaps it would be well to retain them as subspecies of Mus musculus, for the present at least. Possibly in the future one or more of them may have to be suppressed, but more specimens are needed before the matter can be thoroughly worked out.

(I.) Mus musculus bactrianus,\* Blyth, 1846.—This mouse has a wide distribution in Africa and Asia, and appears to be the common house mouse of Southern Persia and the neighbouring regions.† It has the upper parts fallow-red and the under parts yellow or white. M. Lataste has shown that it cannot be distinguished from Mus musculus proper, except in colour, and it resembles very closely Mus musculus flavescens.

(II.) Mus musculus flavescens, Fischer, 1872, which has a

<sup>\*</sup> J. A. S. B. xv. 1846, p. 140; and xxxii. p. 347. Blyth also ultimately united with this species his *E. gerbillinus*, from the Punjab (vide J. A. S. B. xxii. p. 410), and *M. theobaldi*, from Kashmir (vide J. A. S. B. xxii. p. 583.)

<sup>†</sup> Vide Blanford's 'Zoology of Eastern Persia,' vol. ii. pp. 56, 57, where this mouse is figured.

<sup>‡</sup> Fischer, "Das Verfärben einer Hausmaus, Mus musculus, var. flavescens" (Zool. Gart. xiii. 1872, pp. 223-224). Fischer's specimen was from Berlin, but he was evidently unaware that the name flavescens had been previously bestowed by Elliot (Madr. Journ. Lit. Sci. x. p. 214, 1839) on a variety of Mus alexandrinus, or rattus, and by Waterhouse (P. Z. S. 1837, p. 19) on a mouse from Chili. A similar form, or variety, is evidently alluded

reddish brown upper and a light yellow under side. According to Lataste it occurs in Mid-France, Spain, Italy, and the Mediterranean Isles; but there are specimens in the British Museum from Western Hungary that I can only refer to this form, while others from the same lot resemble very closely my Tangier specimens. Examples of this most probably intergrade with those of the preceding form.

(III.) Mus musculus spretus, Lataste (op. cit. 1883), to which form probably belong my Tangier specimens, as well as Messrs. Grant and Baring's mice from the Salvage Isles (Zool. 1895, p. 409). Unless the extra "talon" of the first upper molar can be shown to be constant, I should be inclined to allow Mus spretus only subspecific rank, since it certainly appears to intergrade with Hungarian specimens in the British Museum. Messrs. Grant and Baring's specimens vary somewhat in the distinctness of the line of demarcation between the upper and under sides, and some of them in this respect come very close to Lataste's description. A very large specimen sent to the British Museum from Corsica by Col. J. W. Yerbury resembles these; while one from Malta, presented by Lord Lilford, is more like what I imagine the typical flavescens to be.

The following are the dimensions of some of Messrs. Grant and Baring's specimens:—

				3	8	2	3	2	\$	2	
Head and body			78	85	83	87	80	90	85	mm.	
Tail .											
Hind-fe	oot			17	18.5	17.5	18	18	18.5	17	

The specimens differ from my Tangier mice and also from M. Lataste's decription of *Mus spretus* in the larger size of the tail. There are also very interesting forms or varieties in the British Museum collection from Asia Minor, Quang-tung, and even from

to by the description: "Mus cauda longa mediuscula, corpore cinereo-fusco, abdomine subalbescente" (Linn. Mus. Ad. Frid. i. p. 9), and "Mus domesticus minor, cauda longa subnuda, corpore fusco-cinerascente, abdomine albicante" (Brown, Jour. p. 484); also by De Selys-Longchamps, in his 'Faune Belge' (1842), p. 32, as the var. d. rousâtre. What the true name of this form or subspecies may be I am not prepared to state here; but it seems that Fischer's name will not stand. Possibly the proper name would be Mus musculus brevirostris of Waterhouse, who described Mus brevirostris (Proc. Zool. Soc. 1837, p. 19), and afterwards stated that it was a variety of Mus musculus ('Voyage of the Beagle,' p. 38).

America, whose presence only serves to complicate the whole matter.

The above are the names which have at various times been given to the more distinct races or subspecies of Mus musculus. But although the extreme forms are quite distinct in each case, they are so connected with each other by a series of gradations, that I very much doubt if they can stand as species, especially if Lataste's dental distinction for his Mus spretus turn out to be, as I suspect, a merely individual peculiarity. Hence I have here given them merely subspecific rank, a course which, I think, gets rid of the difficulty.

Of other species which have been described by various authors, Mus algirus, Pomel,\* 1856, has been identified by M. Lataste with Mus sylvaticus, Linnæus; Mus algirus,† Loche (non Pomel), 1867, with Mus musculus bactrianus, Blyth (or some very similar variety); Mus chamæropsis,‡ Levaillant, with Gerbillus campestris, and Mus reboudi,§ Loche, with Mus musculus bactrianus.

Mus poschiavinus, Fatio, 1869, is a black form of M. musculus, which was found commonly in a tobacco manufactory at Poschiavo, in the Canton Grisons, where it fed on tobacco. There remain four very doubtful species, viz. Mus gilvus, M. trizonus, M. spicilegus, and M. arundinaceus, which were described by C. Chyzer in 1882, from MSS. left at his death by Dr. Petenyi. The work being in Hungarian is almost a closed book to me, but so far as I can make out from the Latin "notæ specificæ" and the dimensions of the specimens as given by the author, it is possible that the first two will be found to be synonyms of Mus sylvaticus, while M. spicilegus is probably a form of M. musculus possibly identical with M. musculus flavescens, and M. arundinaceus seems to have been described from a large example of M. minutus.

<sup>\*</sup> Compt. Rend. Acad. Sci. 1856, p. 654.

<sup>†</sup> Cat. Mamm. et Ois. observés en Algérie, p. 25, et Expl. Sci. de l'Algérie, p. 115, 1867.

<sup>‡</sup> Explor. Sci. de l'Algérie, 1867, pl. 5, fig. 1.

<sup>§</sup> Expl. Sci. de Algérie, Mamm., p. 116.

<sup>||</sup> Faune Suisse p. 207, pl. 7.

<sup>¶ &#</sup>x27;Reliquiæ Petenyianæ: Termes-Fuzetek, N. (1881), p. 91, 1882.

# THE PROTECTION OF BEAVERS ON THE RHONE.

By M. GALIEN MINGAUD.\*

Amongst the wild animals which inhabit France at the present day, there are few more interesting than the Beaver. This rodent, harassed as it is on all sides by man, who makes war against it without remorse, is on the point of disappearing from the French fauna, and will soon be no more than a memory of the past, unless some energetic measures are speedily taken to to avert its extinction.

For many years a price was set upon its head by the Syndicate of the digues of the Rhône at Beaucaire-on-Sea by the Little Rhône. This reward, however, amounting to fifteen francs, has been abolished at the pressing instigation of Professor Valery Mayet. This is the first step to success, but it is not sufficient.

It was supposed that the *digues* constructed on the banks of the Rhône in Camargue, to protect the new plantations of the vine and to prevent their submersion, were perforated by the Beavers in the formation of their burrows, and that their solidity in time of flood was thereby impaired.

As a matter of fact, these digues, protected at their base by rocks, are not easily assailed by Beavers. They form their burrows not in the banks, but elsewhere, often far away from water, and frequently on the banks of the Rhône, in the ségonneaux, that is to say, on the low grounds, marshy and uncultivated, which protect the digues from the tide, and where willows and poplars grow spontaneously.

The Beaver is especially located in the part of the Petit Rhône comprised between Fourgues and Sylvéréal (Isle of Camargue). There are some, also, in the Rhône between Avignon and the Port-Saint-Louis-du-Rhône; and they are to be found also in a tributary of that river, the Gardon. The Beaver ascends this river as far as Pont-du-Gard, which is about eight kilometres from its outlet in the Rhône near Comps.

During the year 1895 I noted, in the case of the Gardon, seven captures of this rodent, four of which passed through my own hands. As to the delta of the Rhône, I have not been able to get any precise information. Since the beginning of the year,

<sup>\*</sup> Translated from the 'Revue Scientifique,' 4th April, 1896, p. 448.

to my knowledge, three adult Beavers were killed: one in the Rhône, near Avignon, on January 20th; another in the Gardon, at Montfrin, on February 10th; and the last at the same place on March 22nd.

In common with other naturalists, I would raise my feeble voice on behalf of the French Beavers, and implore the authorities to take energetic measures in order to retard as much as possible the extinction of this animal.

I take the liberty of pointing out some of the steps which our able ministers should be requested to take with one accord in order to protect the lives of the last Beavers of the Camargue, or at least to retard their destruction. Their friendly aid would greatly benefit in so interesting a cause:—

- (1) The Ministers of the Interior should be asked to add a special clause to the game laws applicable only to the departments of the Gard and the mouths of the Rhône where the Beavers are located, and prohibit for some years the killing of these animals. They have always been hunted out of season, and the authorities have shut their eyes to it, under the impression (according to the report of those who kill them for profit) that they are very destructive animals.
- (2) The Minister of Public Instruction should be asked to protect a unique species of mammal and one of the most interesting in our fauna, to be preserved by administrative measures, in the same way as we preserve our megalithic and historic monuments.
- (3) The Minister of Public Works, from this special point of view, should have a watch set on the banks of the Gardon and of the Rhône by ordinary river keepers. In this way one might form a cantonment of these curious animals, and at the same time ensure their not committing any serious depredations outside the valueless land which, so to say, would be given up to them.

I am not unmindful of the many difficulties to be overcome in enlisting scientific interest to bring about the increase of the last French Beavers, and in dispelling the preconceived notion of such riparian owners as imagine that they have reason to complain of their depredations. I would appeal also to all naturalists and to all scientific societies to induce the authorities to interest themselves in this matter.

At the beginning of the present century Beavers were not

rare in certain rivers of Central Europe. At the present day they are only found in Russia, in Germany, and in Austria, and there, far from proscribing these animals, the respective Governments have passed stringent laws in their favour. Those who destroy them are heavily fined. These industrious rodents of inoffensive habits are not considered destructive on the banks of the Dnieper, and its tributary the Pripet, the Volga, the Petchora, the Vistula, the Oder, the Elbe and its tributary the Mulde, and the Danube.\*

French Beavers are now so scarce that it seems to me very desirable to prepare a map of the region of the Lower Rhône, indicating the places which they inhabit on the Gardon and in Camargue, before the end of the present century, in order to have a record as complete as possible of those which still exist, and to localize their haunts. This would form a fitting supplement to the memoir by Professor Valéry Mayet on "The Beaver of the Rhône" ('Compte Rendu des Séances dú Congrès International de Zoologie,' Paris, 1889, p. 58), and to some notes which I published on the same subject in the 'Bulletin de la Société d'Étude des Sciences Naturelles de Nîmes' (1889, p. xxiv; 1894, p. 42 et p. 130; 1895, p. xxxiv, lxix et 100).

# ORDERS MADE BY THE HOME SECRETARY FOR THE PROTECTION OF BIRDS AND THEIR EGGS.

SINCE the passing of the Wild Birds Protection Amendment Act of 1894, a great many applications have been made by County Councils to the Home Secretary, and the Secretary of State for Scotland, for orders prohibiting the killing of birds or taking of eggs either within the county or within certain specified areas.

The result is that between thirty and forty orders are now in force in different parts of the country, differing in various ways as regards close time and species protected, and causing (as we foretold it would do) no end of confusion and uncertainty as to the precise state of the law in any given locality.

So far as we can learn at present, the following orders are in force:—

<sup>\*</sup> A more detailed account of the distribution of the Beaver in Europe will be found in 'The Zoologist,' 1886, pp. 273-280.

ABERDEENSHIRE. — The taking or destroying eggs of the following birds is prohibited throughout the entire county of Aberdeen for a period of one year, from Sept. 1, 1895, viz.: peregrine, kestrel, merlin, long-eared owl, short-eared owl, barn owl, tawny owl, nightjar, goat-sucker, or fern owl; black-headed gull, herring gull, kittiwake, common gull, common plover, lark, crossbill. The taking of eggs of the lapwing is prohibited throughout the entire county of Aberdeen in the year 1896, after April 15 in the said year. The Wild Birds Protection Act, 1880, now applies within the county of Aberdeen to the following birds, as if they had been included in the schedule to that Act, viz.: peregrine, kestrel, merlin, and crossbill.

Anglesea.—All birds are protected from March 1 to Oct. 1, except curlew, diver, dunbird, eider duck, lapwing, mallard, peewit, plover, pochard, shoveller, snipe, teal, wigeon, wild duck, and woodcock (the close time for these being March 1 to

July 31).

ARGYLLSHIRE.—The taking or destroying of the eggs of the following wild birds is prohibited in the islands of Islay, Colonsay, Coll, and Tiree, for a period of one year from Oct. 1, 1895, viz.: wild duck, teal, eider duck, merganser, snipe, dunlin, grebe, lapwing, tern (all kinds), Richardson's skua, pochard, tufted duck, and chough. And the Act of 1880 applies within the islands of Islay, Colonsay, Coll, and Tiree to the tufted duck, as if that species had originally been included in the schedule to that Act.

BEDFORDSHIRE.—By an order dated February 17, 1896, the time during which the taking or killing of wild birds is prohibited in this county has been varied so as to extend from March 1 to August 12, and as regards the kingfisher the time is further ex-

tended so as to be from February 1 to August 31.

Berwickshire.—By an order dated June, 1895, the taking or destroying the eggs of the following species of wild birds is prohibited throughout the entire county of Berwick for one year from July 1, viz.: dipper or water-ouzel, redstart, stonechat, lark, peregrine falcon, barn owl, long-eared owl, tawny owl, gold-finch, bullfinch, redpoll, siskin, wagtail, kingfisher, snipe, ringed plover, common tern, teal, great spotted woodpecker, cuckoo, dunlin, redbreast, heron, rock pipit, sandpiper, mistle thrush, wren, coal tit, blue tit, and long-tailed tit, and by the same order the following among the above wild birds are, in addition, to have the protection of the Wild Birds Protection Act of 1880, as if they had been included in the schedule to that Act, viz.: the dipper or water-ouzel, redstart, stonechat, peregrine falcon, bull-finch, redpoll, siskin, wagtail, redbreast, heron, rock pipit, mistle thrush, wren, coal tit, blue tit, and long-tailed tit.

CAMBRIDGESHIRE.—By an order dated Sept. 23, 1895, the taking or destroying of wild birds' eggs within that part of the

county of Cambridge known as Wicken Sedge Fen is prohibited

for a period of three years from Sept. 7, 1895.

CHESHIRE.—By an order dated July 10, 1895, and in force throughout the whole county of Chester-I. The close time fixed by the Act of 1880 is extended so as to be from March 1 to Aug. 12 in each year. II. The Act of 1880 will now apply within the county of Chester to the kestrel and heron, as if those species were originally included in the schedule to that Act. III. The taking or destroying eggs of the owl, bittern, kingfisher, kestrel, heron, sheldrake, dunlin, black-headed gull, common tern, and oystercatcher is prohibited in the whole of the county of Chester. IV. The Act of 1880 will now apply within a portion of the hundred of Wirrall (area defined) to the following species: redbacked shrike, whinchat, spotted flycatcher, sedge warbler, blackcap, grasshopper warbler, wood warbler, garden warbler, mistle thrush, common bunting, reed bunting, goldfinch, wheatear, chiffchaff, golden-crested wren, yellow wagtail, pied wagtail, skylark, and titlark, as if they were included in the schedule to the Act of 1880. V. The taking or destroying of the eggs of all wild birds is prohibited within the above-named area.

CORNWALL.—By an order dated Dec. 12, 1894, the taking or destroying eggs of the Cornish chough is prohibited throughout the county of Cornwall, under a penalty not exceeding £1 per

egg.

CUMBERLAND.—The taking or destroying eggs of the following birds is prohibited throughout the county of Cumberland, viz.: goldfinch, kingfisher, owls, woodpeckers, black-headed gull, raven, wild ducks, terns, redshank, common buzzard, dotterel, dipper,

kestrel, pied flycatcher, peregrine, and merlin.

Devonshire.—By an order dated Nov. 27, 1895—I. The taking or destroying eggs of any wild bird is prohibited for the period of 1896 to 1900, both years inclusive, within the following area: (1) Lundy Island and the neighbouring islets. (2) Baggy Point district (area specified). (3) Lynton district, parishes of Lynton and Countisbury. (4) Slapton Ley and Start district. II. The taking of eggs of the following birds is prohibited throughout the entire county of Devon, viz.: Ring ouzel, wheatear, whinchat, redstart, nightingale, blackcap, garden warbler, Dartford warbler, fire-crest, wood warbler, reed warbler, grasshopper warbler, dipper, nuthatch, white wagtail, golden oriole, pied flycatcher, goldfinch, hawfinch, crossbill, corn bunting, cirl bunting, reed bunting, rose-coloured pastor, chough, raven, woodlark, nightjar, great spotted woodpecker, lesser spotted woodpecker, green woodpecker, kingfisher, hoopoe, barn owl, longeared owl, tawny owl, marsh harrier, hen harrier, Montagu's harrier, buzzard, kite, honey buzzard, peregrine falcon, hobby, merlin, kestrel, osprey, gannet, little bittern, night heron, bittern, rockdove, quail, oystercatcher, woodcock, snipe, dunlin, green sandpiper, lesser black-backed gull, greater black-backed gull, razorbill, and common guillemot. III. The Wild Birds Protection Act, 1880, will now apply within the county of Devon to the bearded titmouse, nuthatch, Richard's pipit, water pipit, mealy redpoll, lesser redpoll, snow bunting, nutcracker, buzzard, honey buzzard, hobby, merlin, kestrel, and osprey, as if these species were included in the schedule to that Act. Cormorants and shags

are exempted within the limits of the river Exe.

DUMFRIESSHIRE.—By an order made in May, 1895, the taking or destroying eggs of the following birds is prohibited throughout the entire county of Dumfries for a period of one year from the first day of June, 1895, viz.: Buzzard, goldfinch, great crested grebe, common gull, black-headed gull, kingfisher, kestrel, barn owl, tawny owl, long-eared owl, short-eared owl, oystercatcher, ringed plover, pochard, sheld-duck, shoveller, great spotted woodpecker, crossbill, dipper, siskin, skylark, tufted duck, osprey, nightjar, chough, quail. The Wild Birds Protection Act, 1880, within the county of Dumfries will now apply to the following birds as if they had been included in the Schedule to that Act, viz.: Buzzard, kestrel, crossbill, dipper, siskin, tufted duck, osprey, and quail.

DURHAM.—The close time has been varied so as to extend

from March 1 to Aug. 31.

Essex.—The close time has been varied so as to extend from March 15 to Aug. 1 for curlew, dunbird, godwit, oxbird, snipe, wigeon, wild goose, and woodcock, but is unchanged for other birds.

GLAMORGANSHIRE.—By an order dated March 12, 1895, the taking or destroying of the eggs of the kingfisher and goldfinch is prohibited in any part of the county of Glamorgan.

HAMPSHIRE (see SOUTHAMPTON).

HERTFORDSHIRE.—The close time has been varied so as to

extend from Feb. 1 to Aug. 31.

Huntingdonshire.—By an order dated June 25, 1895: I. The Wild Birds Protection Act of 1880 will now apply to the linnet, nuthatch, and swallow, as if those species were included in the schedule to that Act. II. The taking or destroying eggs of the kingfisher, nightingale, nuthatch, owl, wild duck, and woodpecker is prohibited within the whole of the county. The close time has been varied so as to extend from March 15 to Aug. 31, and applies to the Isle of Ely.

Kent.—By an order dated March 11, 1896, the taking or destroying of wild birds' eggs is prohibited within the following areas in the county of Kent for the space of two years from March 20, 1896:—(1) So much of the Isle of Sheppey (including therein Elmley Island) as lies south of the road running from

Queenborough through Eastchurch to Warden Point. much of the Sittingbourne and Sheerness railway as lies between Kingsferry and the Sittingbourne railway station, and bounded on the south by the London, Chatham, and Dover Railway, from Sittingbourne railway station to Whitstable railway station, and bounded on the east by the main road from Whitstable station to the sea, and bounded on the north by the Swale and Whitstable (3) The west by the Minster and Deal Branch of the South-Eastern Railway from Minster railway station to Deal railway station, and bounded on the south by the road from Deal railway station to Deal pier, on the east by the sea, and on the north by the South-Eastern Railway from Minster station to Ramsgate station. (4) East and south of the main road from Walmer through Dover to Folkestone from the point where such road passes through the southern boundary of the Walmer urban district to the point where such road enters the borough of Folkestone, such area being bounded on the east and south by the sea, on the north by the Walmer urban district, and on the south by the borough of Folkestone. (5) South and west of the main road which runs from Appledore railway station through Snargate, Brenzett, and Old Romney to New Romney station, and thence to Littlestone-on-Sea; such area being bounded on the north-west by the Royal Military Canal from Appledore railway station to the Sussex boundary, on the south-west by the Sussex boundary, and on the south and east by the sea. II. The taking of eggs of the following birds is prohibited within so much of the county of Kent as is not within the Metropolitan Police District: Bearded tit, buzzard, goldfinch, golden oriole, great plover or thickknee, hawfinch, hobby, honey buzzard, Kentish plover, kestrel, kingfisher, martin, merlin, nightingale, osprey, owl (all species), peregrine falcon, swallow, swift, turtle-dove, wryneck. III. The Wild Birds Protection Act, 1880, will now apply within so much of the county of Kent as is not within the Metropolitan Police District to the following species as if they were included in the schedule to that Act, viz.: Bearded tit, buzzard, chaffinch, hawfinch, hobby, honey buzzard, Kentish plover, kestrel, martin, merlin, moorhen, osprey, peregrine falcon, swallow, swift, turtledove, wryneck. IV. The close time limited by the Act of 1880 (except as regards the common wild duck) is varied throughout the county so as to be from March 1 to Aug. 12 in each year. A separate order has been made by the Secretary of State under the said Acts applying to so much of the county of Kent as is within the Metropolitan Police District.

Kirkcudbright and Wigtown.—By an order made in May, 1895, the taking or destroying eggs of the birds named in the order for Dumfriesshire [which see] is prohibited for a period of

one year, from June 1, 1895.

LINCOLNSHIRE.—By an order dated May 10, 1895, the taking or destroying of the eggs of the sheldrake, sea-pie or oystercatcher, ringed dotterel, arctic, common and lesser terns, redshank, and common sandpiper, is prohibited within the following area within the administrative county of the ports of Lindsay, Lincolnshire, viz.: The sea coast, sandhills; dunes, waste lands, fitties, foreshore, and warrens, situate between the sea and the land side of the sea-wall, embankment, ditch, quick fence, or other artificial boundary separating the same from the cultivated land. order came into force June 10, 1895. The close time has been varied so as to extend from March 15 to Aug. 31. By an order dated Jan. 3, 1896, the Wild Birds Protection Act, 1880, will apply within the administrative county of the parts of Kesteven. Lincolnshire, to the kestrel, merlin, hobby, buzzard, honey buzzard, swallow, house martin, sand martin, swift, and wryneck, as if those species were included in the schedule to that Act. II. The taking of eggs of the following birds is prohibited within the administrative county of the parts of Kesteven, Lincolnshire, viz.: Goldfinch, kingfisher, nightjar, nightingale, owls (of all species), ruff or reeve, woodpecker, kestrel, merlin, hobby, buzzard, honey buzzard, swallow, house martin, sand martin, swift, wryneck, teal, and wild ducks of all species.

MIDDLESEX.—By an order dated Jan. 29, 1896: I. The Wild Birds Protection Act, 1880, within the county of Middlesex, applies to the wryneck, swallow, martin, swift, bearded tit, shrike, kestrel, merlin, hobby, buzzard, honey buzzard, osprey, and magpie, as if those species were included in the schedule to that Act. II. The taking of eggs of the following birds is prohibited within the county of Middlesex, viz.: Nightingale, goldfinch, lark, nightjar, woodpeckers, kingfisher, cuckoo, owls, kestrel, buzzard, honey buzzard, merlin, hobby, osprey, wryneck, swallow, martins, swift, bearded tit, shrike, magpie, wheatear, stonechat, whinchat, redstart, flycatchers, sedge warbler, reed warbler, blackcap, garden warbler, wood warbler, willow warbler, chiffchaff, wbitethroat. lesser whitethroat, long-tailed tit, nuthatch, wren, golden-crested wren, wagtails, hawfinch, linnet, buntings, starling, landrail or corncrake, and coot. The close-time has been varied within the county council area, so as to extend from Feb. 1 to Aug. 31.

Norfolk.—By an order dated April 8, 1895: I. The taking of eggs of any wild bird is prohibited for a period of one year, from May 1, 1895, within specified areas (which include Hickling and neighbouring broads with surrounding country to the seashore, and the series of broads known as Ormesby, Rollesby, Hemsby, Filby, and Burgh Broads). II. The taking of eggs of any wild bird is prohibited for a period of one year from May 1, 1895, within a further specified area—namely, the whole of the foreshore . . . from the estuary sluice at North Wootton to the

eastern boundary of the parish of Cley-next-the-Sea. III. The taking of eggs of the following wild birds is prohibited throughout the entire county of Norfolk, viz.: The bearded titmouse. crossbill, white or barn owl, wild ducks and teal of all species, Norfolk plover, stone curlew or thickknee, ruff or reeve, ring dotterel, oystercatcher or sea-pie, terns or sea-swallows, and great crested grebe or loon. IV. The Wild Birds Protection Act, 1880, within the county of Norfolk, now applies to the bearded titmouse and crossbill as if these two species had been included in the schedule to that Act. This order came into operation on May 1, 1895, and by an order dated April 7, 1896, its provisions are to remain in force for another year, namely, until May 1, 1897.

Northamptonshire.—By an order dated Jan. 15, 1896: I. The Wild Birds Protection Act, 1880, within the whole county of Northampton, applies to the heron, buzzard, honey buzzard, kestrel, merlin, hobby, osprey, hen-harrier, nuthatch, and wryneck, as if those species were included in the schedule to that Act. II. The time during which the taking or killing of wild birds is prohibited, so far as regards the heron, is extended so as to be from March 1 to Sept. 1. III. The taking of eggs of the goldfinch, buzzard, honey buzzard, kestrel, merlin, hobby, osprey, hen-harrier, kingfisher, nightingale, nightjar, nuthatch, owls, sandpiper, woodpeckers, and wryneck is prohibited throughout the county. Within the liberty of Peterborough the close time has been varied so as to extend from March 15 to Aug. 31.

NORTHUMBERLAND.—The close-time in this county is from March 24 to Aug. 11 for all birds except the following: Dotterel, eider duck, guillemot gull (except black-backed gull), kittiwake, oystercatcher, puffin, razorbill, sea-swallow or tern (the close time for these being from March 1 to Aug. 31).

OXFORDSHIRE.—By an order dated March 22, 1895, the taking or destroying of the eggs of any owl is prohibited in any part of the county.

Shetland.—The taking or destroying eggs of the following birds is prohibited, viz.: White-tailed or sea-eagle, great skua or bonxie, arctic or Richardson's skua, whimbrel or tang-whaup, red-necked phalarope, and red-necked diver (rain bird or ember goose)

Somersetshire.—By an order dated July 27, 1895, the Wild Birds Protection Act, 1880, applies within the whole of the county to the kestrel, merlin, hobby, buzzard, and osprey, as if those species were included in the schedule to that Act.

SOUTHAMPTON.—By an order dated Sept. 7, 1895, the taking or destroying eggs of the buzzard, honey buzzard, kingfisher, Montagu's harrier, nightingale, owls, and woodpeckers is prohibited in any part of the county of Southampton.

STAFFORDSHIRE.—By an order dated Nov. 28, 1895: I. The

taking or destroying eggs of the following birds is prohibited throughout the entire county of Stafford, viz.: The goldfinch, buzzard, merlin, kestrel, hobby, osprey, kingfisher, nightingale, nightjar, owls, nuthatch, sandpiper, woodpeckers, wryneck, curlew, and great-crested grebe (loon or diver). II. The Wild Birds Protection Act, 1880, applies within the whole of the county of Stafford to the spotted flycatcher, pied flycatcher, tree-creeper, sand martin, martin, swallow, wagtail, and swift, as if those species were included in the schedule to that Act.

SUFFOLK, EAST.—By an order dated Dec. 24, 1895, the taking of eggs is prohibited in the years 1896, 1897, and 1898 in the following places, namely: The sea-coast, beach, foreshore, sand-hills, saltings or salt-marshes, situate between the sea or estuaries and the land side of the sea or estuarial wall, embankment, ditch, fence, or other artificial or natural boundary separating the same from the cultivated land, from the north side of the river Blyth to Landguard Point (excluding the estuary of the Alde above the

ferry at Slaughden Quay, Aldeburgh).

WESTMORLAND.—By an order dated May 29, 1895, the taking or destroying of eggs of the barn owl, brown owl, long-eared owl, short-eared owl, buzzard, merlin, kestrel, goldfinch, black-headed gull, peregrine falcon, kingfisher dotterel, raven, heron, bittern, woodcock, dipper (or water ouzel) and golden plover is prohibited in any part of the county of Westmorland for five years from

June 25, 1895.

YORKSHIRE, E. RIDING.—By an order dated April 1, 1895, the taking of birds' eggs on the promontory of Spurn, including Kilnsea Warren, south of the line taken by the road leading from the village of Kilnsea towards the site of the old village of Kilnsea, is prohibited for a period of five years from March 31, 1895. By an order dated May 10, 1895, the time during which the killing or taking of wild birds is prohibited under the Wild Birds Protection Act, 1880, is now varied in the East Riding so as to be from March 1 to Aug. 15 in each year.

YORKSHIRE, W. RIDING.—The close time for wild birds in the West Riding of Yorkshire has been extended so as to be from

March 1 to Aug. 11, both days inclusive.

YORKSHIRE, N. RIDING.—The close time has been varied so as to extend from March 1 to Aug. 11.

## NOTES AND QUERIES.

#### CETACEA.

Bottle-nosed Dolphin in the Thames.—I have now no doubt that you are quite correct in your surmise (p. 143) that the Dolphin caught here some days ago is the species known as the Bottle-nosed Dolphin, Delphinus tursio. The very pale colour of the under parts led me to suppose it was D. delphis. However, the shape of the beak (the lower jaw being curved and longer than the upper jaw), the comparatively few teeth, as well as the large size of the animal, point, I think, unmistakably to Delphinus tursio. A second Dolphin was found dead on the shore at Isleworth on the 20th inst. This also is D. tursio, but a smaller specimen. It is a male, of a uniform dark grey, and measures  $9\frac{1}{4}$  ft. in length by  $5\frac{1}{4}$  ft. in girth. I counted 22 teeth on each side of each jaw  $(\frac{22}{32} - \frac{22}{32})$ ; they were all, I think, pointed, not truncated like the back teeth of the Chiswick specimen. It would be interesting to discover what induced these large marine Cetacea to make their way through the traffic-laden waters of the Thames to London.—Alfred Sich (Burlington Lane, Chiswick).

[Another correspondent, Mr. Walter Crouch, of Wanstead, who examined the specimen, has kindly furnished some further particulars. He states that the teeth in both the upper and lower jaws were much worn down, indicating that the animal was of mature age. A photograph forwarded by Mr. Sich enables us to correct certain faults in the figure given by Bell in his standard work on British Quadrupeds, and furnishes a reliable outline for any future illustration that may be required.—Ed.]

#### BIRDS.

Sale of Great Auk's Egg.—On April 20th last a crowd of naturalists flocked to King Street, Covent Garden, for a sale by auction of a Great Auk's egg, which belonged to the late Mr. J. H. Tuke, of Hitchin, Hertfordshire, and was disposed of by order of his executors. This egg is believed to be of Icelandic origin, and in 1841 was in possession of Friedrich Schulz, of Dresden, who in May of that year sold it to an English dealer, Hugh Reid, of Doncaster, for £2 6s., as Reid himself informed the late Robert Champley, of Scarborough (cf. Grieve's 'History of the Great Auk.' 1885, Appendix, p. 28). From Reid it passed into the possession of the late Mr. Tuke, and it is now the property of Mr. Noble, of Henley-on-Thames, to whom it was knocked down at the recent sale by the auctioneer, Mr. J. C. Stevens, for the sum of 160 guineas.

Greater Nightingale in Kent.—In the last two lines of his article on the Nightingale, in the fourth edition of 'British Birds,' Prof. Newton has remarked, "there is no sufficient reason for supposing that the larger Nightingale of Eastern Europe has ever visited this country." Writing from Frinsted, Kent, on May 5th inst., Mr. Gervase F. Mathew remarks :--"I saw a couple of queer warblers yesterday, and while they are fresh in my memory will describe them. They were considerably larger than Nightingales, stoutly and robustly built, of a smoky olive-grey colour, under parts lighter; tail short and square; beak strong shining brown or black; large black eyes. They were evidently a pair, and were chasing each other about: they came quite close to me, and I had them in view several minutes. Their note also was quite strange to me. What could they have been? I have never seen anything like them before. They were in a small coppice by the side of the road between this and Sittingbourne." On this communication the Rev. M. A. Mathew observes :-- "I enclose a note from my brother. The strange warblers are without any doubt Daulias philomela, the Northern Nightingale, of which as yet there is no record in this country that I know of. My brother's description of the birds tallies closely with that given by Mr. Dresser in 'Birds of Europe.'-MURRAY A. MATHEW."

Red-throated Pipit in Sussex .- As I am perhaps in some measure responsible for the recognition of the specimen of Anthus cervinus reported in a recent issue of 'The Zoologist' (supra, p. 101), I may be allowed to add one or two particulars. The bird was shot by a boy near this town on Nov. 13th last, and was taken by him to Mr. G. Bristow, our well-known taxidermist. After setting it up Mr. Bristow asked me to examine it, when I suspected its identity. My suspicion was confirmed after reading the account of this species in Mr. Dresser's 'Birds of Europe,' and in the work of the same name by the late Dr. Bree, and I submitted the specimen for examination to Prof. Newton. Not having an example of A. cervinus in winter plumage available for comparison, Prof. Newton was unable to pronounce with certainty, but was inclined to regard it as assignable to this species. Mr. Dresser next examined the bird, and found, after "carefully comparing it with a series of specimens of both A. pratensis and A. cervinus, that in all specimens of the latter the markings on the breast are much larger and broader." Dr. Sharpe then examined the bird, and declared it to be without doubt an example of Anthus cervinus (Pall.). It was by him exhibited at a meeting of the B.O.U. Club held in the month of December last. Your correspondent omitted to point out that the specimen in question is the first one obtained in Britain in autumn-the others having occurred in spring (cf. Sharpe's Brit. Birds in 'Allen's Naturalists' Library,' vol. i. p. 109). I cannot agree with the assertion of your correspondent that the "distinguishing features [of the latelyprocured specimens when placed among a series of A. pratensis] are readily observable." A similar comparison in my own case convinced me of the truth of the remark of Col. Irby, that "in winter the difference

between the two species is hardly distinguishable" ('Key List,' 2nd ed. p. 20). In the diagnosis here, "under tail-coverts" is printed for "upper tail-coverts," the same slip having also crept into this author's 'Ornithology of the Straits of Gibraltar,' 2nd ed. p. 115). My thanks are due to the three gentlemen above mentioned for kindly examining the bird, and to Mr. Bristow for drawing my attention to it.—W. RUSKIN BUTTERFIELD (St. Leonards-on-Sea).

The Song of the Icterine Warbler. - I have been greatly interested in reading Mr. O. V. Aplin's account of "Bird-life in Eastern Algeria": I only wish that I could enjoy similar experiences. With regard to the song of the Icterine Warbler, I must confess that I agree with those who think it one of the finest we can possibly hear. Prof. Collett, writing of the occurrence of this bird in Norway, remarks:-" It is the very best of our songsters; its song not a little resembles that of the Nightingale, but one finds in it again the ditty of the Thrush." This description seems to me to be true to the life. Some years ago I had the pleasure, with my boy, of hearing this remarkable song in the Bosch, or Public Park at the Hague, and we thought it fully equal to that of the Nightingale, although at times it uttered some very strange and jarring notes. I found this bird nesting at Kissingen afterwards, and the hen allowed us to overlook her on the nest without being disturbed. The male usually perched in the trees near the Saale river close by, and there he continually emitted those strange cries which are well described by Mr. Seebohm when he says, "it screamed and warbled and chuckled, and sung voluminously." Some of the notes reminded me of a Parrot, and were almost startling, so loud and weird were they, I often wondered that the passers-by did not stop to reconnoitre. But the sweet song we did not hear at Kissingen, nor afterwards at Karlsbad, where I also heard this bird. My lamented friend Mr. J. G. Rathbone, of Dunsinea, Co. Dublin, who shot the only specimen of this bird ever obtained in Ireland, assured me that its song was really splendid, and he was an excellent authority in these matters.—CHARLES W. BENSON (Rathmines School, Dublin).

Supposed Occurrence of the Buff-backed Heron in Ireland.—In working through the Reports of the Historical Commission, I came across the following passage, which may perhaps have escaped the observation of Irish naturalists, for whose benefit I have copied it. It occurs in a long letter addressed to J. C. Walker by Major-General Vallancey, and is dated from Cove (= Queenstown, Cork), January 25th, 1794:—"I have seen what Mr. Pennant has not seen—the small white Crane of Asia and Africa. It is a most beautiful bird, about the size of a turkey pullet of three months. In Asia it is called the 'Paddy-bird,' from its eating the green 'paddy' or rice; its plumage milk-white, its bill and legs yellow. This bird, one of a

couple, was seen by Mr. Daunt in a bog near Roberts Cove, half-way between this and Kinsale Harbour. He shot one, and sent it to Mr. Daunt, apothecary, in Cork. It is about a month killed; the legs and beak begin to turn black. Dr. Longfield has asked it, to send to Mr. Pennant. I claim it for the Academy, or College Museum; and if refused the whole bird, half of it cut longitudinally, and each half glued on a board, would satisfy both parties. If not the half, I claim the liberty of making a drawing. I am afraid I shall succeed in neither unless Mr. Daunt, apothecary, is written to in the name of the Academy" (Thirteenth Report, App. pt. viii. p. 227). The colour of the soft parts points to the Buff-backed Heron having been the species mentioned. The bird being in winter dress the buff plumes would be absent. At all events, the note preserves the fact of one of the rarer Herons having been killed in Ireland a hundred years ago. — H. A. Macpherson (Carlisle).

Wood Wren in Co. Donegal.—On May 8th three Wood Wrens were singing close to my house, in larches and oaks. It is about fifteen years since I heard the song in Ireland, then, as now, in Co. Donegal, but about twelve miles south of this, at Glenalla, when I obtained a specimen, which is preserved in the National Museum, Dublin. Since that outrage they never returned to Glenalla to my knowledge. Years before that, in the early seventies, I often heard the Wood Wren in Wicklow, at Derrybawn and at Powerscourt; but of late years I have looked for them there in vain. They always arrived in the first week of May, and twenty years ago used to remain throughout the summer, probably or almost certainly breeding, at Derrybawn. Other observers have, I believe, lately met with this warbler, which is so rare in Ireland, and no doubt Mr. Ussher has full statistics; but, so far as my experience goes, the bird is getting scarcer instead of commoner, as appears to be the case in Scotland. The Wood Wren has also been met with in Mayo and Sligo. The song of the birds I heard here was not fully uttered, the early high plaintive notes being omitted, and only the latter double trill uttered, with a broken beginning; but this is often the case.—H. CHICHESTER HART (Carrablagh, Portsalon, Letterkenny).

Wild Geese on Migration affected by Electricity.—In the 'Revue Scientifique' of April 11th is a curious observation on this subject. On March 10th, between 10.30 and 11 a.m., a large flock of Wild Geese, travelling in triangular formation to the number of about 200, were observed passing at a great height over the commune of La Réorthe (Vendée), going northwards. On their way they encountered a thick black cloud, though no wind was perceptible to the observer. As soon as the Geese reached this cloud they were abruptly dispersed, and were seen to divert their course in all directions in small parties of four or five, uttering

bewildered cries. The cloud continuing to advance, they were driven back about three kilometres, and it was nearly three-quarters of an hour before they appeared able to rally and re-form in line as before, almost where they had originally dispersed. This incident, says the writer, may perhaps be explained as follows:—The cloud, which had not shed a drop of water, though presenting a stormy appearance, may have been charged with electricity; the Wild Geese, on coming in contact with it, would then have received a severe shock; hence their rout and agitation. But it is surprising that birds accustomed to migration were not instinctively warned of the danger, and did not turn a little out of their way to avoid it.—J. E. Harting.

#### SCIENTIFIC SOCIETIES.

#### LINNEAN SOCIETY OF LONDON.

April 16th, 1896.—Mr. W. PERCY SLADEN, Vice-President, in the chair.

Messrs. V. H. Blackman and W. B. Hemsley were elected, and Messrs. J. W. Cornwall, W. M. Christy, P. Ewing, and J. H. Leigh were admitted, Fellows of the Society.

Mr. George Massee read a paper on the types of Fungi in the collection of the late Rev. M. J. Berkeley, which was presented to Kew in 1879, and which contains rather more than 11,000 species. Many of the species were described more than fifty years ago; hence the diagnoses are in some cases too brief, and do not embody points which at the present day are considered to be of importance. In many instances this has led to the same species being redescribed by others as new. Mr. Massee now supplied careful descriptions of the types, with a view to obviate future confusion, and to secure for Berkeley as the original describer the priority in nomenclature which is justly his.

Mr. A. D. Michael read a paper upon the internal anatomy of Bdelia (the Red-snouted Mite), giving the results of three years' work and of many hundreds of dissections and serial sections. The material was furnished chiefly from the Zoological Station at Port Erin, and the subject is practically new, only one paper (describing a few parts of the female) having been hitherto published. The male organs of Bdella are extraordinarily complicated: a pair of testes on each side of the body are joined by a tubular bridge to those on the other side. In Bdella Basteri these testes are sunk in the thick walls of great "embedding sacs," which are glandular, but are absent from other species. The vasa deferentia are transformed into immense mucous glands which communicate by "antechambers" with the

penial canal, into which a great azygous accessory gland and another divided by a number of fine lamellæ discharge. Two chitinized air-sacs, spiked inside, are sunk in the genital organs and communicate with the outer part of the penial canal. The female organs are very simple. There is a large stalked organ, resembling the so-called. "sucking-stomach" of Diptera, arising from the œsophagus; no such organ has hitherto been known among the Acarina; it is proposed to call it the "receptaculum cibi." The pharynx is exceptional in having a wholly flexible roof, instead of the chitinized one found in allied Acari: this involves numerous other modifications. brain and nervous system are fully described. The respiratory organs consist of a long tubular air-sac on each side of the body, which gives off a multitude of fine unbranched tracheæ and communicates by a single tracheal trunk running along its exterior with the stigma by the mandibles. The salivary glands are very large and elaborate, but allied to the Trombidium type. The epipharynx is a highly specialized organ. The paper was criticised by Mr. Sladen, Prof. Howes, and Mr. A. R. Hammond.

### ZOOLOGICAL SOCIETY OF LONDON.

April 21st.—Sir W. H. FLOWER, K.C.B., LL.D., F.R.S., President, in the chair.

The Secretary read a report on the additions that had been made to the Society's Menagerie during the month of March, and called special attention to a young female Gorilla, Anthropopithecus gorilla, from French Congoland, obtained by purchase; a young male Markhoor, Capra megaceros, from the vicinity of Peshawar, British India, presented by Col. Paterson, March 18th; a pair of a rather scarce species of Duiker Antelope, Cephalophus coronatus, from West Africa, purchased; and a Silver-backed Fox, Canis chama, from Cape Colony, presented by C. W. Southey, Esq., of Culmstock, Schoombie Station, South Africa.

Mr. Sclater exhibited and made remarks on some specimens from Nyasaland, lately sent home by Sir H. H. Johnston, K.C.B. Amongst these was a fine head of the Sable Antelope, *Hippotragus niger*, from the Zomba plains, and an example of the Brindled Gnu, *Connochætes gorgon*, or of a nearly allied form, believed to be the first specimen of this Antelope sent home from British East Africa.

Mr. Sclater also exhibited, by the kind permission of Mr. Justice Hopley, of Kimberley, a pair of horns of the so-called *Antilope triangularis*, said to have been obtained somewhere on the Zambesi. These horns are now generally supposed to be abnormal horns of the cow Eland.

Mr. W. E. de Winton gave an account of a small collection of Mammals from Ecuador, lately sent to the British Museum by Mr. L. Söderstrom, H.B.M. Consul at Quito. It contained examples of only three species,

but two of these appeared to be new to science. One of them was a new Deer, proposed to be called *Pudua mephistophelis*, and the other a Rodent of the genus *Ichthyomys*, which was named *I. söderstromi*.

Mr. F. E. Beddard read a paper on the Anatomy of a Grebe, Æchmophorus major, and added some remarks upon the Classification of the Charadriiform Birds, to which he considered the Auks to be more nearly related than to the Grebes.

A communication was read from Messrs. F. D. Godman and O. Salvin on the Butterflies of St. Vincent, Grenada, and the adjoining islands, based on the collections made by Mr. Herbert H. Smith.

A communication was read from Miss E. M. Sharpe containing an account of the Lepidoptera obtained by Dr. Donaldson Smith during his recent expedition to Lake Rudolf. Examples of ninety-one species were obtained, of which two were apparently new: these were described as Panopea walensensis and Papilio donaldsoni. A second paper by Miss Sharpe contained an account of the Lepidoptera obtained by Mrs. E. Lort Phillips in Somaliland. Eighty-four species were enumerated, one of which, Teracolus ludovicia, appeared to be undescribed.

A communication from Mr. W. F. Kirby contained descriptions of some Dragonflies obtained by Mr. and Mrs. Lort Phillips in Somaliland. Three of these were described as new to science.—-P. L. Sclater, Secretary.

## NOTICES OF NEW BOOKS.

The Life of Joseph Wolf, Animal Painter. By A. H. Palmer. 8vo, pp. i—xviii, 1—328. With numerous Illustrations. London: Longmans, Green & Co.

Two-and-twenty years ago, when reviewing, anonymously,\* Wolf's 'Life and Habits of Wild Animals,' published in 1874 by Macmillan, we took occasion to give a sketch of the artist's life, and a brief notice of his works to that date, commenting upon the extraordinary way in which the general public at that time failed to recognize and properly appreciate his unrivalled skill as an animal painter. Mr. A. H. Palmer, in the 'Life' which is now before us, has unconsciously paid us the compliment of printing an extract from that review as one of the very few which he says is worth quoting from the score or so of press notices collected by him. Twenty years is a long time to wait for a

<sup>\* &#</sup>x27;The Field,' 3rd January, 1874.

public acknowledgment of the correctness of one's views, but it furnishes one more illustration of the old adage that "truth will prevail," and affords additional gratification in the reflection that the artist still lives to receive the homage which is his due.

Whether it is a wise course to publish a biography in the life-time of the subject of it, is a question which may, for many reasons, admit of doubt; but it has at least this advantage, that it enables the biographer to collect and utilize much information. the correctness of which can only be properly vouched for by direct appeal to the person chiefly concerned, who is naturally in possession of the largest number of facts concerning his own work. For this reason we are disposed to welcome the publication of this volume, although issued somewhat before the time when it might be more properly expected to appear. It is evident that the biographer has taken extreme pains with its preparation. and has produced a volume which will be welcomed alike by naturalists and artists. It appeals perhaps more strongly to the former class of readers, because Mr. Palmer's comments are those of a lover of nature rather than an art critic. On the other hand. students of animal life will highly appreciate the illustrations with which the book is filled. These consist of more than fifty full-page reproductions of finished drawings and paintings by Mr. Wolf, with a smaller number of sketches in the text.

Mr. Palmer, we trust, will forgive us for saying that we do not think he has made so good a selection of pictures as he might have done. Too many of his reproductions are copied from the 'Proceedings of the Zoological Society,' wherein the aim of the artist has been not so much to compose a picture, as to give a severely accurate portrait of some mammal or bird sufficient to indicate its distinguishing characters, and to enable its identification by scientific zoologists. Many of these pictures, naturally, can have little attraction for the general public, who, knowing nothing of the species represented, are unable to form any opinion as to the merit of the drawings. Take for example Accipiter collaris (p. 22), Astur griseiceps (p. 62), Germain's Polyplectron (p. 69), Leucopternis princeps (p. 80), Pithecia monachus (p. 92), Dactylopsila trivirgata (p. 97); or the Dead Aye-aye (p. 103), the Silver Marmoset (p. 146), and the Bashful Monkey (p. 186). Except as careful studies of particular species, none of these have anything to recommend them outside the pale of

scientific criticism. What ninety-nine people out of every hundred will most admire are the beautiful compositions in which the artist has a story to tell, and tells it famously, without any catalogue description. Of those reproduced by Mr. Palmer, it will suffice to name:-"A Storm in the Alps" (p. 149), wherein Ptarmigan, Chamois, and a Mountain Hare are seen seeking shelter from a pitiless snow-storm; "Morning" (p. 171), which shows a dead Lion, shot the previous day, discovered dead in the morning light by Vultures; "Tame and Wild" (p. 171), depicting a fight between a Bison and a domestic Bull on the borderland between prairie and cattle-ranche; "Surprise" (p. 176). where two Hares foraging over the snow encounter a wild-looking scarecrow, which seems to be solemnly warning them with uplifted arms,—it is a still frosty night, yet some snow is dropping from those arms,-for crouched against the stake that supports the figure is a Fox, quivering with hungry excitement; "A Night Attack" (p. 210), depicting a raid by a Marten upon a Wood Pigeon's nest in a pine tree; "Inquisitive Neighbours" (p. 221), two Squirrels frolicking round the stem of a pine come suddenly on a Ringdove sitting upon her eggs; she is indignant at the intrusion, and rises from her eggs with half-opened wings, prepared to buffet the nearest assailant. These are amongst the most pleasing of the artist's works, and could they be engraved, we feel confidant they would become as popular as those by Sir Edwin Landseer and Sir John Millais.

The reproductions by process as exemplified in the volume before us seem to us tame and inadequate. We miss the individuality of the painter, which is much better interpreted in the vigorous engravings by Whymper, which form the illustrations to the earlier work, 'The Life of Wild Animals.'

Joseph Wolf is one of the very few painters whose works can stand the test of criticism by artists, naturalists, and sportsmen, and we should like nothing better than to see published, in a good-sized quarto or folio volume, a representative collection of his finished pictures, reproduced not by process or photogravure, but in the very best style of engraving.

For such a series we could name several pictures in private collections which are not mentioned in Mr. Palmer's volume, and a few others, also unnoticed, which have been exhibited in public. Meantime everyone should read the artist's 'Life.'